

## PATENT SPECIFICATION

734,203



Date of filing Complete Specification: September 7, 1953.

Application Date: September 10, 1952. No. 22720/52

Complete Specification Published: July 27, 1955.

Index at acceptance:—Classes 26, A1(A:E:G), A3(A:D); 28(2), O; and 138(1), O.

## COMPLETE SPECIFICATION

## Improvements in Drainage and Washing Devices for Sinks

I, MARTHA BRACE, of 762, Foundry Lane, Seacroft, near Leeds, in the County of York, a British Subject, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to drainage and washing devices to be used in sinks for the purpose of collecting debris and washing purposes and allowing water and liquid matter to drain away through the usual sink outlet.

Drainage devices usually provided for a sink comprise a simple shallow dished receptacle with a complementary perforated receptacle fitted therinto. This device is merely placed on the bottom of the sink and often the liquid is allowed to collect in the main receptacle to be emptied at intervals or such receptacle has one or more holes for the dirty water or other liquid to drain out into the bottom of the sink for it to be washed away down the drainage outlet. With such a device the sink becomes stained, dirty and greasy and requires frequent cleaning to keep it in the required condition. Devices are known for washing purposes comprising a casing to stand anywhere in a sink and allow drainage therinto as previously stated. Within the casing is a deep perforated container which in one case is rotatable with a closure lid and in another case it forms a removable strainer on which a washing bowl may be mounted. It is also known to provide a dish-washing machine comprising an imperforate casing with a drain connection pipe, an inner perforated spray-forming container and an internal perforated basket. There is a lid closure for the machine and a hot-water feed pipe into the space between the casing and spray-forming container.

According to the present invention there is provided a drainage or washing device of the type described comprising an open-topped imperforate receptacle with an outlet opening in its bottom, a pipe connection from the opening for engagement with a sink drainage outlet, and a relatively shallow perforate removable debris tray extending over the whole of the bottom of the receptacle, cover-

ing the outlet opening but spaced slightly above it, whereby debris is retained in the tray and liquid drains away directly down through the sink outlet without contaminating the sink itself.

The improved device can include a rack or like means to support articles in or over the receptacle for simple drainage or whilst being washed. The outlet pipe may include a filter and may comprise a short rigid pipe to fit into the sink outlet.

The invention also includes a removable or displaceable cover for the receptacle to provide a complete housing for articles to be washed therein. Spray means may be provided in the housing cover for washing articles in the device.

Referring now to the accompanying drawings in which embodiments of the invention are shown:—

Fig. 1 is a partly broken away perspective view of a drainage receptacle;

Fig. 2 is a sectional side view of the receptacle;

Fig. 3 is a sectional view of the bottom of a modified receptacle;

Fig. 4 is a part sectional view of the drainage receptacle with a cover to provide a complete housing with spray means; and

Fig. 5 is a detail view of an alternative spray element.

In a particular embodiment of this invention shown in Figs. 1 and 2, a relatively deep receptacle 1, say of rectangular shape in plan, is made with a central or other opening 2 in its bottom with a short outlet pipe 3 leading therefrom adapted to fit into the normal drainage outlet from a sink. This receptacle outlet may have a removable or fixed filter 4 provided as a safeguard against any debris escaping down the outlet. Moreover, the bottom of the receptacle is shaped to ensure correct drainage to the outlet and this can be provided by simply inclining or curving the bottom 5 in all required directions towards this outlet, or by the provision of one or more channels. The receptacle may have small depressions to form feet 6 or be otherwise shaped, or provided with means, to raise the bottom slightly from the sink or keep it stable in use. Moreover, the

receptacles may have handles 7 or other means for enabling it to be readily lifted into and out of position. The upper edge of the receptacle may be beaded or otherwise  
5 formed to give it a smooth finish, and prevent any fear of damage to articles or injury to a person handling the device. Also a resilient sealing ring 8 may surround the outlet 3.

10 Within the receptacle is located a dished perforated or meshed debris collector 9 which fits neatly into the bottom of the receptacle and projects up only a short distance to form a relatively shallow removable  
15 tray. This collector will cover the outlet and can rest on feet, ledges or other formations; it is shown resting on the boundary edges of the bottom, to be at least slightly clear of the bottom of the receptacle. This debris  
20 collector can be shaped or furnished with means 10 to enable it to be readily lifted out of the receptacle for depositing debris and for cleaning purposes.

The device may also incorporate a rack 11  
25 or like means which can lie in the same plane as the upper edge of the receptacle, or slightly below as shown or above such edge as desired and can be made readily removable from engagement with the receptacle  
30 and/or mounted so as to be readily displaceable at will. Conveniently, the shown rack is made of wire or strip means forming parallel division elements so that plates can be placed into the receptacle to rest in the  
35 debris collector and be separated from one another or in groups. Thus plates or other articles can readily be set on edge or end to drain into the receptacle or allow water to be poured or sprayed thereover for cleansing  
40 them and washing away debris into the receptacle tray and liquid to drain away out of the sink outlet. Such rack can be used for supporting various articles which can simply be laid or hung thereon if necessary  
45 and will allow drainage into the receptacle due to its skeleton formation. A rack or skeleton structure of this type can be made to simply hook or clip on to the edges of the receptacle as shown and thus be readily removable.  
50 Alternatively, the rack or structure may have a part hooked or affixed to the receptacle and be hinged or pivoted to be lifted out of position for, say, the purpose of removing the debris collector.

55 As shown in Fig. 3 the bottom 5 of the receptacle 1 may be flat and a removable drainage bottom 12 fitted into the receptacle. This bottom 12 has a lip 13 to surround a removable filter 14 and the two parts combine to form a relatively shallow removable  
60 unit. In this instance the outlet pipe 3 projects from the bottom 12 through a hole in the receptacle bottom 5.

In Fig. 4 the receptacle 1 is provided with a removable cover 15 which is shown as  
65 being a push fit over the beaded lip of the receptacle, but may fit inside or be hinged in position, and thus a complete housing is provided for washing articles therein. A  
70 rose member 16 is shown fitted in the head of the cover and adapted to receive a flexible pipe for connection to one or more taps in known manner. The rose may be fixed, or pivotal so it can be rocked about by hand.  
75 Alternatively, the rose can have a funnel inlet for water to be poured therein. Any other form of spray or jet device may be used, such as an elongated perforated pipe (or pipes), or a rotatable device turned by  
80 the water action. Fig. 5 shows a composite spray and jet device 17 which may be fixed or rotatable, with holes or slits in the ends of the jets 18.

A device constructed as above can be  
85 located in a sink with its outlet pipe directly engaged with, say fitted into or seated over, the sink outlet and thus will collect debris, hold articles if desired, and generally provide a "sink tidy" or washing device whereby  
90 dirty water or other liquid drains directly through the sink outlet without entering the sink. Thus the latter can be kept in a very clean condition without the need for the usual frequent cleaning operations.

What I claim is:—

1. A device for use in sinks for drainage or washing purposes, comprising an open-topped imperforate receptacle with an outlet opening in its bottom, a pipe connection from the opening for engagement with a sink  
100 drainage outlet, and a relatively shallow perforate removable debris tray extending over the whole of the bottom of the receptacle, covering the outlet opening but spaced slightly above it, whereby debris is retained  
105 in the tray and liquid drains away directly down through the sink outlet without contaminating the sink itself.

2. A device according to Claim 1, including a rack or like means to support articles in or over the receptacle for simple drainage or whilst being washed.

3. A device according to Claim 1 or 2, wherein the outlet pipe is a short rigid member to fit into the sink outlet.

4. A device according to any of the preceding claims, including a removable or displaceable cover for the receptacle to provide a complete housing for articles to be washed therein.

5. A device according to Claim 4, characterised by the provision of spray means within the housing cover for washing articles in the device.

6. A device according to Claim 5, wherein the spray means comprises a spray element

carried by the cover of the housing which may be capable of movement in its mounting.

7. A device according to Claim 5 or 6, wherein the spray means or element is adapted to be connected to a water source, such as one or more taps, or furnished with other water inlet means.

8. A device according to Claim 2, wherein the rack comprises a removable or displaceable horizontal wire or skeleton member substantially in the same plane as the upper edge of the receptacle or adjacent thereto.

9. A device according to Claim 3, having a filter element within the receptacle outlet.

10. A device according to any of the pre-

ceding claims, wherein the drainage bottom of the receptacle is constructed to facilitate drainage to the outlet, and the outlet pipe may form part of the receptacle or of a removable bottom therein.

11. A drainage or washing device for sinks, arranged and constructed substantially as described with reference to the accompanying drawings.

Dated this 4th day of September, 1953.

URQUHART-DYKES & LORD,

Chartered Patent Agents,

12, South Parade, Leeds 1, and

Maxwell House, 11, Arundel Street,

Strand, London, W.C.2.

### PROVISIONAL SPECIFICATION

#### Improvements in Drainage and Washing Devices for Sinks

I, MARTHA BRACE, of 762, Foundry Lane, Seacroft, near Leeds, in the County of York, a British Subject, do hereby declare this invention to be described in the following statement:—

This invention relates to drainage devices to be used in sinks for the purpose of collecting debris and allowing water and liquid matter to drain away through the usual sink outlet.

Drainage devices usually provided for a sink comprise a simple shallow dished receptacle with a complementary perforated receptacle fitted therein. This device is merely placed on the bottom of the sink and often the liquid is allowed to collect in the main receptacle to be emptied at intervals or such receptacle has one or more holes for the dirty water or other liquid to drain out into the bottom of the sink for it to be washed away down the drainage outlet. With such a device the sink becomes stained, dirty and greasy and requires frequent cleaning to keep it in the required condition.

According to the present invention there is provided a drainage device of the type described comprising a receptacle with an outlet for direct engagement with a sink drainage outlet, and a perforated removable debris collector in the receptacle, whereby debris is retained and liquid can drain away directly down through the sink outlet without contaminating the sink itself.

The improved device can include a rack or like means to support articles in or over the receptacle. The outlet may include a filter and may comprise a short pipe or equivalent element to fit into the sink outlet.

In a particular embodiment of this invention a relatively deep receptacle, say of rectangular shape in plan, is made with a central or other opening in its bottom with a short outlet pipe leading therefrom adapted

to fit into the normal drainage outlet from a sink. This receptacle outlet may have a removable or fixed filter provided as a safeguard against any debris escaping down the outlet. Moreover, the bottom of the receptacle may be shaped to ensure correct drainage to the outlet and this may be provided by simply inclining the bottom in all required directions towards this outlet or by the provision of one or more channels. The receptacle may have small depressions to form feet or be otherwise shaped, or provided with means, to raise the bottom slightly from the sink and keep it stable in use. Moreover, the receptacle may have handles or other means for enabling it to be readily lifted into and out of position. The upper edge of the receptacle may be beaded or otherwise formed to give it a smooth finish, and prevent any fear of damage to articles or injury to a person handling the device.

Within the receptacle is located a dished perforated debris collector which fits neatly into the bottom of the receptacle and may project up only a short distance. This collector will cover the outlet and can rest on feet, ledges or other formations to be at least slightly clear of the bottom of the receptacle. This debris collector can be shaped or furnished with means to enable it to be readily lifted out of the receptacle for depositing debris and cleaning purposes.

The device may also incorporate a rack or like means which can lie in the same plane as the upper edge of the receptacle, or below or above such edge as desired and can be made readily removable from the receptacle and/or mounted so as to be readily displaceable at will. Conveniently the rack may be made of wire or strip means forming parallel division elements so that plates could be placed into the receptacle to rest in the debris collector and be separated from one another

or in groups. Thus plates or other articles can readily be set on edge or end to drain into the receptacle or allow water to be poured thereover for cleansing them and washing away débris into the receptacle to drain away out of the sink outlet. Such rack can be used for supporting various articles which can simply be laid or hung thereon if necessary and will allow drainage into the receptacle due to its skeleton formation. A rack or skeleton structure of this type may be made to simply hook or clip on to the edges of the receptacle and thus be readily removable. Alternatively, the rack or structure may have a part hooked or affixed to the receptacle and be hinged or pivoted to be lifted out of position for say the purpose of re-

moving the débris collector.

A drainage device constructed as above can be located in a sink with its outlet directly engaged with, say fitted into or seated over, the sink outlet and thus will collect débris, hold articles if desired, and generally provide a "sink tidy" whereby dirty water or other liquid drains directly through the sink outlet without entering the sink. Thus the latter can be kept in a very clean condition without the need for the usual frequent cleaning operations.

URQUHART-DYKES & LORD,  
Chartered Patent Agents,  
12, South Parade, Leeds 1, and  
Maxwell House, 11, Arundel Street,  
Strand, London, W.C.2.

Leamington Spa: Printed for Her Majesty's Stationery Office, by the Courier Press.—1956.  
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which  
copies may be obtained.

Fig 1.

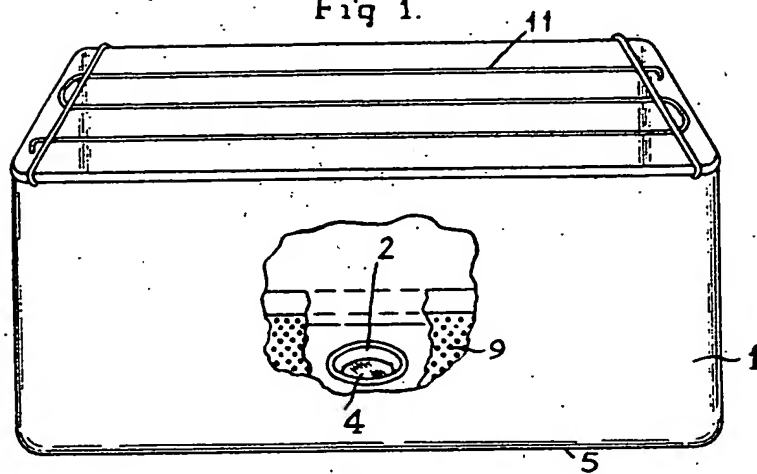


Fig 2.

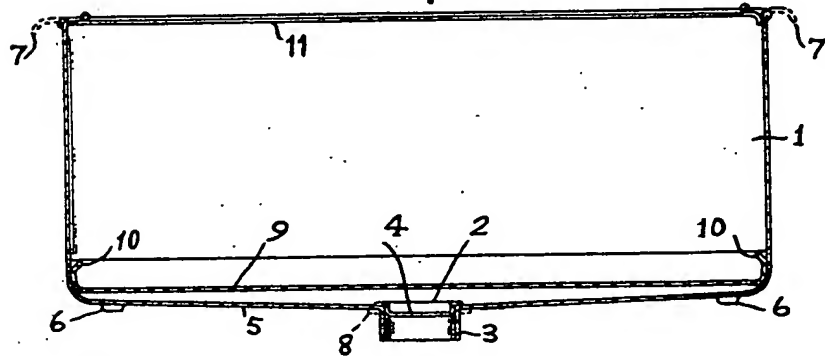


Fig 3.

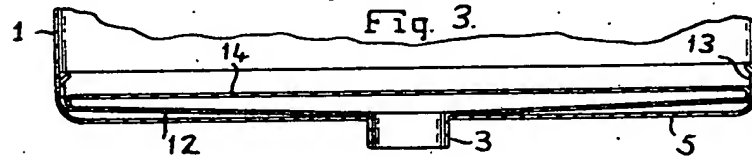


Fig 5.

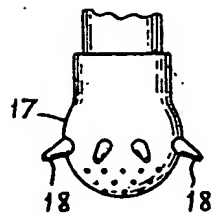
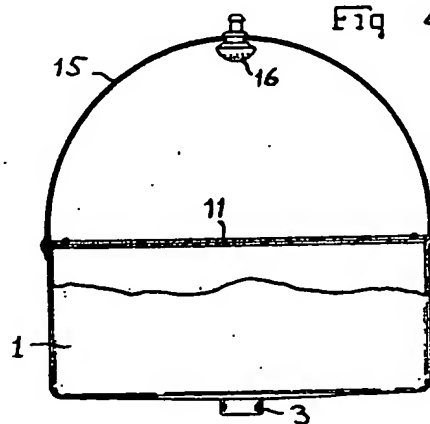


Fig 4.



**This Page Blank (uspto)**